

What is claimed is:

1. Method for scheduling the service of a thread, said method comprising the steps of:
 - receiving a latency information associated with the thread; and
 - scheduling the thread in accordance with said latency information.
2. The method of claim 1, wherein said latency information is associated with an interrupt and said scheduled thread is for servicing said interrupt.
3. The method of claim 2, wherein said latency information is representative of real time units.
4. The method of claim 3, wherein said latency information represents a time duration that is necessary to service the thread.
5. The method of claim 3, wherein said latency information represents a time at which said scheduled thread will be processed.
6. The method of claim 3, wherein said latency information represents a time duration that is necessary to setup the thread.
7. The method of claim 3, wherein said latency information is dependent on a hardware constraint.
8. The method of claim 3, wherein said latency information is provided by a device driver.
9. Apparatus for scheduling the service of a thread, said apparatus comprising:
 - means for receiving an interrupt from a hardware device;

means for acquiring latency information associated with the interrupt;
and

means for scheduling the thread to process the interrupt in
accordance with said latency information.

10. The apparatus of claim 9, wherein said latency information is
representative of real time units.

11. The apparatus of claim 9, wherein said latency information is dependent
on a hardware constraint.

12. The apparatus of claim 11, wherein said hardware constraint is a size of
a buffer.

13. The apparatus of claim 11, wherein said hardware constraint is a fullness
of a buffer.

14. The apparatus of claim 11, wherein said hardware constraint is
dynamically defined.

15. The apparatus of claim 9, wherein said latency information is generated
by a device driver associated with the hardware device.

16. Method for scheduling the service of an interrupt, said method
comprising the steps of:

acquiring latency information associated with the interrupt;
determining a latency value from said latency information; and
scheduling a thread to service the interrupt in accordance with said
latency value.

17. The method of claim 16, further comprising toggling an interrupt line.

18. The method of claim 16, further comprising:
determining the thread should be activated; and
activating the thread for processing.
19. The method of claim 16, wherein the scheduling includes organizing any pending threads and the thread responsive to the latency value and any latency values associated with the pending threads.
20. The method of claim 16, wherein said latency value represents a time duration that is used to determine when the thread should be activated for processing.